

News service to go live in January

by George Black

Former Prime Minister Ted Heath, who is on the Iris advisory council, said he hoped the service would influence how multinational corporations treated the developing nations by reducing the risks of investment.

Heath, speaking at the UK Online User Group meeting in London, was questioned by international delegates, many of whom were sceptical both about the partiality of the data and about the scheme's value to the poor countries.

He retorted "It seems to me we are providing the utmost that a client can require — and the price is very reasonable."

"North and South is the major issue facing us in the future, more important than East-West relations," he argued.

The project is owned by a world banking, insurance and financial investment consortium. Its advisory council also includes former US Defence Secretary and former World Bank president Robert McNamara; former Colombian Finance Minister Rodrigo Botero; and former French Trade Minister Jean-François Deniau.

Tom Crowley, systems consultant for the Netherlands-based company, said the eight clients so far included Timex, but he expected the main response to come from Third World countries, particularly those dependent on a small number of commodities.

Clients will begin by giving a profile of themselves and their requirements. This profile is used to generate a program that tells the computer what data to select. Fifteen thousand reports a day will be handled in eight languages by a team of 48 experts from a journalistic background. Iris will issue six daily reports on events in the world's main regions.

Local area networking of the Ethernet type will be the next



BROWN... "It is not easy to change one's philosophy."

Computer Automation plans to sell direct to big companies

by John Riley

COMPUTER Automation has changed tack to get directly to big users. It is now selling its systems to big companies, systems houses and directly to end users as well as its traditional OEMs.

"It is not easy to change one's philosophy, because support and post sales software service have to be provided," commented CA's European general manager, Mike Brown, "but we have organised extensive back-up in the UK, and are now in a position to begin an aggressive marketing campaign."

CA announced a new software system, Unix, at Comdex, Las Vegas late last month. This is a time sharing system which runs on CA's Series 5 machines and fits between CA's bottom end multi-user business system Omnilx and its recently introduced top end real time Caros system.

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But Spicer claims there is no conflict of interest.

IBM cuts up to 35% off small system prices

by George Black

IN A bid to boost its market share IBM has brought in big cuts in the prices of its smaller systems. Reductions of between six per cent and 35 per cent come into effect this month.

The changes affect products in the minicomputer and distributed processing range, including the 8100 information processor, 8775 display terminal, System/38, System/34 and System/23 computers, the 5217 printer, Displaywriter, and other data systems and printers.

And new special terms have been introduced for bulk buyers.

The cost of memory for the 8100 has been cut, making a 9% drop in the price of the processor, with improvements of between 10 and 25% in the terms for volume purchase agreements on the 8101, 8120 and 8140. Similarly, the 8775 volume agreements show

discounts of from six to 15%.

System/38 model 3 has been reduced in price by £5,253; model 4 by £6,458; model 5 by £12,037,

with a further 29% offered off memory prices; and model 7 by £10,698. System/34 is cheaper by £1,715 for nine and 13 Mbyte models, by £3,430 for 27 Mbyte models and by £8,074 for the 64, 128, 192 and 256 Mbyte models.

System/23 prices are reduced by 17% for the 5322 integrated model and 23% for the 5324 ergonomic model.

The 5247 disc drive is 25% cheaper and the 5246 diskette drive 20%. Costs of the 5217 printer are 6% down for small numbers and as much as 15% for over 100.

Displaywriters are down by £522 for the 6580 electronic modules, by 20% for the 6360 diskette drive and 28% for 5218 and 5288 printers. The 5280 distributed data systems series becomes cheaper by up to 20%.

MAP gets the spirit

by John Riley

CHRISTMAS spirit was added last week to the Microelectronics Application Programme's fifth Case Studies launch. Two MAP-subsidised microelectronic applications, one for ensuring consistency of whisky malting (MAP grant of £22,000 to Robert Hutchinson Company) and one for a model train set (MAP grant of £67,000 to Hornby Hobbies), were introduced in London.

George Hook, general manager of Robert Hutchinson commented: "Malting is glorified gardening, and you have to watch it all the time." Microelectronics control the process of malt production.

Microelectronics have added a new dimension to model train sets. A master unit can now control 16 locomotives and 99 accessories to run simultaneously at different rates on the same stretch of line with continuous even current.

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EEC may erect trade barriers

by John Riley
EEC leaders are aiming to erect trade barriers to protect Europe's high technology industries.

The government leaders at the EEC summit conference in Copenhagen reached a series of agreements. These called for regulation of trade to protect the EEC and its new industries from outside competition, and for a decision by the end of March 1983 (the next summit) "on the priority measures proposed by the Commission to reinforce the internal market".

This would mean increased pressure on Japan both to import more European goods and to slow down its exports to the EEC.

The EEC summit is not part of the EEC machinery proper and has no powers of decision. It is a political body which acts to provide a political impetus, and as such can help define priorities. Its agreements have to go through traditional channels where they can either end up as law or get bogged down.

There are several other agreements. One was on the need to help young people train for high technology — in the words of the official communiqué there was agreement on "creating more employment opportunities and professional training possibilities for young people to permit a fulfilment of their justified aspirations."

"In this connection it is important that they are given a chance to take advantage of the opportunity."



Japan buys first Kanji Cobol compiler from UK company

by John Kavanagh
A UK company work on the world's first microcomputer Cobol compiler to support Japanese characters has paid off with a £190,000 order from a Japanese computer supplier.

Micro Focus, which has done £1.1 million worth of business in Japan with its CIS Cobol over the last 14 months, won the order from Oki Electric Industry. The contract rounded off a year in which Micro Focus almost doubled its revenue from last year's £2 million.

The Oki agreement covers advance royalty payments on up to 3,000 sales of the Japanese version of CIS Cobol on Oki's If-800 microcomputer.

But this could be just the start: over 90% of Japanese business applications systems are written in Cobol.

£150 million market in UK for Datapoint's new portable terminal

by Andrew Thomas
DISTRIBUTED processing specialist Datapoint has launched a new portable terminal — and didn't pay a penny towards its development.

The terminal has been designed and built by Reading-based Portofane Computer Terminals, a six-man operation headed by ex-Datapoint sales manager Hywel Evans.

PCT was set up in January with £1 million of venture capital from the City, raised by Evans.

Taking six of Datapoint's staff, Evans formed the new company, which has received no financial backing from Datapoint itself. There is not even a Datapoint presence on the PCT board.

But now that the terminal is in production, Datapoint is handling all aspects of marketing and support and, according to managing director Brian Gifford, is headed for a market of 60,000 units, valued at £150 million, in the UK alone.

The terminal is aimed chiefly at the van sales market, where salesmen visiting retail outlets can use it to keep track of prices, orders and stock, and produce a printed invoice on the spot. Application programs are down-line loaded from a central computer, and details of transactions handled by the device can be returned there by telephone line.

A four-line, 128-character LCD display is incorporated in the device, which can run for up to two weeks on a single charge, and weighs only 4½ pounds. Should Evans' prediction of 1,000 units sold in the next 12 months come true, production will be set up in the enterprise zone at Swanwick Field, Staffordshire, Derbyshire, and IBM installed.

Sub-editors then cut, correct and write headlines for the stories by hand, as usual.

The only other UK newspaper to go this far is the Nottingham Evening Post, which, as early as 1978 introduced terminals into its

Journalists go online in IoW

by Philip Hunter

THE Isle of Wight Weekly Post is the first UK newspaper to persuade its unions to accept stories written and edited by reporters online at a computer terminal. The paper has agreed in principle with the National Union of Journalists and the National Graphical Association to a three-phase computerisation.

"We couldn't get the NGA nationally to go the whole way, so we had to adopt a phased approach," says Peter Thompson, associate editor of the 102,000 circulation Portsmouth Evening News, which will follow its sister Isle of Wight Weekly into the first phase next year.

The NGA gives the three-phase scheme a muted welcome. "The

unions have always co-operated with the application of technology, but we are still to be convinced of the full merits," says a spokesman.

Only the first phase has been formally agreed by the NUI and NGA. This replaces typewritten video terminals for reporters, who write the stories, correcting them as they go along with a word processor. The finished article then goes down a telephone line to a Digital Equipment computer in Portsmouth, from which it is printed out.

The technology for full computerisation has been available for several years, and has already been implemented by many newspapers in other countries, especially in the US. But union resistance means that the UK will have to wait.

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French air network under fire

by Jack Gee
AIR France is under fire from foreign airlines for persuading French travel agents to accept a network of reservation terminals which will prevent its rivals from proposing their own flights, hotel bookings and other facilities.

The computerised booking network, known as Estrel, will go into service in travel agencies all over France from the end of 1983.

It will be equipped with a specially designed Transac-Alcatel terminal. This has a 15/26 central unit with a 128K Octet memory, a one million character floppy disc, a VS 82,000 character memory and printer for producing both ticket and printouts. The Transac-Alcatel unit can also be used for office records and accounting.

Estrel was presented to the French Federation of Travel Agents at its annual conference in Marrakesh, Morocco. The French computer service firm Slags showed the travel agents a slatbank of travel brochure information which it is preparing in conjunction with Estrel.

The Japanese Kanji characters can be used in CIS Cobol for paragraph and data names and literals, the variables made up by the programmer. Cobol reserved words — verbs, date definition and so on — remain in English.

The Micro Focus product can handle all the 6,000-plus Kanji characters as well as Japan's Kata-kana alphabet used for Western words which are not represented by other existing Japanese characters.

"The most significant feature of this product is that application end users can see Kanji characters rather than a less familiar alphabet," said Ben Wint, who developed CIS Cobol some four years ago. Wint led the Kanji development team, which took just three weeks to complete its work.

Japan accounted for 10% of Micro Focus' business in 1981.

ESTREL will cost about £900 a month to rent.

European rights

NETWORK Technology has signed an agreement worth an estimated £10 million for European marketing rights to the IBM SNA communications network made in Australia by Systems Technology. Any ASCII terminal device can be connected into an SNA network by Systems Technology's 3703 gateway, which costs a typical user about £10,000.

Service contract

UK service company Netelex has won a two-year £100,000 contract to service the microcomputers, terminals and printers made by Sheldon Instruments. Netelex will service the Signet 2 range of microcomputers launched at Comdex 82, the Sheldon 200 series and the 1000 range.

"We didn't even look at anyone else to do our marketing for us," he says.

Prime upgrade

PRIME Computer UK has placed a £510,000 order for its twin 350 system from Cidcorp International Bank. The system upgrades the bank's existing Prime 400 equipment, and the increased processing power will run a real time dealing program for European securities.

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SALES BRIEF

Philips wins \$10 million WP deal

PHILIPS has scooped a \$10 million order for word processing systems from the US Federal Accounting Office.

The first phase of the five-year contract involves delivery of 150 standalone word processors and 14 P5004 dual workstations shared logic systems at GAO headquarters in Washington, and 21 regional offices.

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The NGA gives the three-phase

Information Technology Year was given an official farewell last week at London's Barbican Centre . . . Kevan Pearson reports

End of IT82 'just the beginning'—Thatcher



The Prime Minister used some IT to get it across to an audience dominated by individuals from the computer industry.



Department of Industry would be responding to it in the New Year.

He also said that he had noted what had been said during the first day about the need for adult education.

Failure to accept new technology would sabotage our future, he claimed to know a "fair amount about IT" had only increased to six per cent.

Ken Cure, an AUEW official, pointed out that understanding what IT means is what counts, not merely being aware of the term "Information Technology" exists.

The poll showed that though many more people were aware of the idea, the number of people who had favourable views of IT was the same, at 35%, as last year.

Interestingly, trade unionists thought more favourably about IT than did non-trade unionists.

A separate survey of business attitudes showed a favourable response — 94% thought it would make business more productive and 87% thought it would make UK companies more competitive, while 58% thought it would generate further unemployment.

IT Minister Kenneth Baker closed the debate, and the conference. His speech held more solid material than Thatcher's — he even mentioned the Alvey Committee and its report and said the

point was hammered home time and time again that we need radical changes in society in order to be able adequately to take advantage of the potential benefits that the "information era" will bring. What was missing was a constructive input — or even response to the points raised — from the politicians present.

It remains to be seen what form the ghost of Christmas future will take.

DUFFY . . . "Our acceptance of IT is not unconditional".

but new technology should serve society, not the other way round.

He supported his point with the fact that in the computer and electronics industries 8,000 jobs were lost in 1981 alone, yet this was supposed to be where jobs were being created. "Growth in IT will mean fewer hours of work being available for everyone."

His answer to this — and the answer given by many others during the two days — was a reduction in the working week, with "more genuine leisure time available to everyone, not the enforced idleness of the dole queue."

Clive Latimer, manufacturing director of Mars Electronics, of the Mars Industries Group, was given the task of responding to Duffy's interesting and entertaining speech.

Latimer's theme was that as the "information era draws to a close, the concept of work will probably die with it."

"This means changing the way we see work and riding ourselves once and for all of the 'work ethic'. Education is an end in itself, and a lifelong experience," he said.

"The industrial society created the concept of work and failed to live up to it."

It was left to Ken Barnes, the IT82 project director, to sum up the achievements of IT82. He was given only 15 minutes, nor exactly a sliver of time in which to describe a whole year's achievement.

"Terry Duffy was the main speaker in the 'Must There be Winners and Losers?' debate. His answer was simple. 'That depends on what decisions are made and who makes them.'

"I have a firm commitment to IT. Britain must spend more on IT to be competitive. We do

it in stock now! Prices are single unit quantity. £1250 extra."

Now with DEC field service.

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Full graphic capability.

High resolution matrix.

Light pen option.

Retina VT100 features.

Supports graphics packages.

£1250.00 (£1100 extra).

Conversion needs experienced staff

by George Black
DON'T undertake a conversion without a proper plan, or using inexperienced staff, DASD's Tom Patti advised a user workshop.



DREYFUS. "Restricted by huge investment in existing software."

"Would you try to install a major, brand-new system without a plan using junior personnel? Then why even consider doing a conversion that way?" said Patti.

He was speaking at the first of a series of IAL Gemini workshops in London's Barbican Centre, entitled Data Processing Conversion with No Surprises.

Most managers hated the very word conversion and viewed the process as traumatic, disruptive, expensive and unending, he said. But it did not have to be such an uncontrollable leap in the dark.

His prescription for overcoming the problems was to have a thorough survey in advance. "You have to get very definitive about where you're coming from and where you're going. Talk to your people about how you are going to do it."

It was important to list not only the programs, files and jobs to be converted, but also those which would not need to be converted. The number of lines of code involved was not a safe basis for

Key to relational databases

THE major deficiency in existing relational database systems is the lack of support for primary and foreign keys. This is the view of Chris Date, advisory programmer to IBM in California and author of a new book, An Introduction to Database Systems.

Date told a Pergamon State of the Art seminar in London that no one had yet done a good job on the matter of keys, though Novad and other systems were moving in the right direction.

The book tackles eight topics concerning databases, superseding Date's previous work.

The real time system's graphics extension was unwrapped in the US in the autumn and is to be available here in the first quarter of

1983.

Non-computing users will be able to learn how to produce their own pie charts or bar charts from raw statistics. And executives can doodle to edit the company figure in an easily digestible format.

The Mapper is so organised that it can be handled at various levels of competence, from complete novices to machine code experts. And for less disposable data a hard-copy Hewlett-Packard plotter can be attached.

The acronym stands for Maintaining, Preparing and Producing Executive Reports, but the emphasis is now on turning the art of report generation into a more systematic process.

Unix tool comes to UK

A UNIX version of a successful American design tool is to be available in the UK from January.

PDL/81 is the Unix version of PDL which has had considerable success in the US running on IBM mainframes and Digital Equipment PDP-11s. Under Unix the product will run on DEC PDP-11 and Vax, and 16-bit micros such as the Onyx, Zilog and Altos

machines.

WP Computers of Stevenage has been awarded the exclusive UK distributorship for PDL/81, which is claimed to cut development times by as much as 30%.

"The benefits are astounding, we have found out by using PDL," said Graham Evans, managing director of WP Computers spokesman.

The optimetrix 8010 wafer stepper, made by Eaton Semiconductor Equipment Operations in the US, will give the university the most advanced optical techniques available for integrated circuit production. Dimensions as small as one micron per circuit can be printed.

"The apparatus is in the forefront of technology," said a SERC spokesman.

A LBAD to cut the size of desktop computer systems was taken with the curtain-raising of new storage products by Shugart at the Las Vegas Comdex show. The company followed its announcement of a 3½-inch microfloppy

disc drive with a new half-height 5¼-inch rigid Winchester drive.

There are two models: the SA 706 with 6.67 Mbytes of unformatted store on one platter, costing \$550 in OEM quantities, and the SA712 with 13.3 Mbytes on two platters.

MICRO NEWS

Chip-making equipment for Edinburgh University

WHAT may be the most advanced piece of chip-making equipment in Europe is to be delivered to Edinburgh University in February.

The university's micro-fabrication facility – an offshoot of the electrical engineering department – is to get an Eaton wafer stepper at a cost of about £600,000 on a grant from the Science and Engineering Research Council.

This means that Edinburgh will be able to supply chips to other British universities which are working in the same research field.

Edinburgh has now received £2.5 million out of a total programme of £7.5 million to be spent on chip research by SERC over the next four years.

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Shape of things to come?



Could this be the shape of computers to come? Kinetronics' 83C, due for launch in January, measures 14½ inches by 9½ across the desk-top and 19 inches high, so that the screen is at eye level. The 83C gives ¾ or 1½ Mbytes disc capacity with 64K RAM. The 83CG model offers graphics with a colour monitor connector.

Half-height mini Winchester

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Leading-edge OEM products are just part of the story. Wait till you hear about the support we put behind them.



When you're looking for a supplier, obviously you want the most competitive product available — at a competitive price.

But those two things are really just the beginning of a solid, long-term OEM relationship with Hewlett-Packard. We also give you the service, training, documentation, support and the commitment to customer satisfaction that you'd expect from a major international company.

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Whether you integrate our hardware into your systems, or develop software for specific applications, your special expertise creates entirely new markets.

So we want to make it easy for you to do just that. We start by offering a wide range of products to work with: from fully programmable hand-held computers and desk-top models to complete data processing systems; along with an even wider selection of peripherals that are engineered to work together. That means you won't have to worry about interfacing.

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We put a lot into our products. And a lot more behind them.

You're probably familiar with the kind of performance and reliability we deliver. But we think you'll be just as pleased to see the level of support we give you.

Since we're interested in solid, long-term relationships, we're ready to put all the strength of our support organisation behind you and your customers. So you can offer site planning and installation; contractual maintenance; per-incident and self-support services.

You'll have the resources of our 170 offices in 39 countries behind your product, on any basis you like. From comprehensive, 24-hour, on-site maintenance to economical 'return-to-us' service.

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Obviously, there's more to a successful OEM relationship than we can discuss here. We've put together a new OEM brochure that gives you full details about our products, policies, and the way we protect you. It even covers the special discounts we offer for your prototype development. Write to us now for a copy. Or simply call your local HP office. Then let's go to work.

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Willie Kite

PLATFORM

Barney Gibbons is chairman of the CAP Group.

It's all Greek to the man in the street...

**PROFILE**

Company 'doctor' who built world's No 1 software house

THE chip in the foreground of our picture does not exist — it is an optical illusion. John Imlay is holding up a rudimentary holographic device.

He has great ambitions for holography. "Just think — with computers and lasers, you could have Bo Derek in your living room," says Imlay.

If anyone can make this come true, he can. Imlay is head of the world's largest software house, Management Science America, a job he has held since 1971.

When Imlay took over this responsibility the company was in serious trouble. The company had been formed in 1963 with five people and grew too quickly into the consultancy field, employing over 760 people. When Imlay took over, he reorganized MSA into a software-only company and kept it going. As a result 50 jobs were saved.

By 1972, he returned the company to profitability with a turnover of \$2.7 million. He repaid his major secured creditors and became majority owner in 1973. In 1979, he was elected chairman of the MSA board and chief executive officer.

Imlay was born in Florida in August 1936, and moved to Georgia as a child, graduating at the Georgia Institute of Technology in 1958. He then worked as a rep for the Atlanta branch of the Unisys division of Sperry-Rand until 1965.

Imlay is unhappy about Sperry dropping the name Univac. "It's terrible," he comments.

From 1965 to 1969, he worked as branch manager for electronic data processing at Honeywell, followed by a period of crisis management for various banks and insurance companies.

"Before joining MSA, I worked on a lot of troubled companies, but I wanted the challenge of building a company instead of just salvaging one after another," says Imlay.

He decided to make MSA his permanent home. "I saw the opportunity of working with highly intelligent people," he explains.

A large measure of MSA's success must be attributed to Imlay's readiness to put the stamp of his personality on the company. MSA has the image of a company going places with someone at its head



IMLAY... "You could have Bo Derek in your living room."

who positively invites public scrutiny, where other companies, IBM for example, prefer to play safe by keeping the mere mortals at the head

head out of the limelight for the sake of corporate continuity.

Not that IBM has always been like that — under Thomas J. Watson

DOWNTIME

Santa does OEM deal

FATHER Christmases ain't what they used to be. When I was a lad they came down the chimney. Now you have to visit them enthroned in their shop departments, with droves of store detectives to protect their whiskers.

Such high street Santas existed in my day, too, but then they gave away decent presents like plastic dolls, and gollwogs. Now all they

do is take orders for the big day.

Which is a bit of a farce because they don't come in person any more — they delegate their duties to the postman.

But one thing I can tell you.

Such has been the demand for personal computers this year from children that one enterprising Santa has done an OEM deal with Clive Sinclair.

The calculating lady who started it all in 1848

LADY LOVBLACK, daughter of the poet Lord Byron, was the user of the world's first calculating machine. In 1848 she used a machine the size of a minicomputer.

10 YEARS AGO

FROM COMPUTER WEEKLY OF DECEMBER 14, 1972: An increase of 380% in the cost of software services to users of secondhand ICL systems obtained from outside the company was announced... Winner of the Computer 84 essay competition, predicted that by the next decade there would be terminal kiosks in shops, from which the public would be able to access computers.

What is not quite so well known is that she can genuinely be held as the world's first computer programmer.

But my trump is that our lady of computing foretold that future ap-

plications of calculating machines would not lie with simple number crunching, but with algebraic manipulation of symbols such as we have now with artificial intelligence languages like LISP.

At the recent Pergamon State Art review, for example, six papers used intersecting circles to put over their message at some point. Other conferences recently have had their share, too.

Which all adds up to a lot of balls.

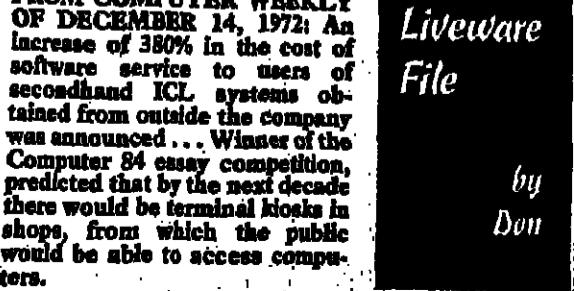
WHAT DO YOU REGARD AS THE BIGGEST ACHIEVEMENT OF IT 82?

...ACHIEVEMENT OF IT 82?

USING THE COMPUTER CREATIVELY...

...TO CUT THE JOBLESS TOTAL AT A STROKE!

DAILY MIRROR



Ringing the changes

GOOD news for the UK glue industry came last week with the announcement of British Telecom's entry to the office automation market. Cynical industry observers have long drawn attention to ICL's fastest growing department, the NC division.

NC does not in this case refer to numerical control, but to Name Changing. The bulk of ICL's erstwhile manufacturing staff, who have had considerable time on their hands since Rob Wilmot's decision to manufacture nothing but paperwork, are likely to be redeployed within NC.

And the people who brought

you the appalling Buzby creature

were on the verge of perpetrating yet another crime against humanity. Merlin was almost named Buztel.

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DAILY MIRROR

By any other name...

ANCIENT Greece was thick with philosophers absorbed in their endeavour to square the circle. Now at computer conferences, a related activity seems to be preoccupying speakers — that of cubing the circle.

The process involves drawing three circles which either are mutually intersecting, or at least linked in a chain. Although I must confess I have seen three circles

prised off, and shiny new ICL labels glued in their place.

Now that BT has stated its intention to market ICL kit under its brand name Merlin, the same procedure will be repeated by highly-skilled Telecom engineers, using the latest high technology screwdrivers.

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DAILY MIRROR

Top secret

WITH aplomb, scandal and security in the air again, let's have a thought for GCHQ computing staff wanting an honest change of job. What a doodle in the interview room — being able to despatch all the questions about experience with "Sorry, I can't tell you — Official Secret Act and all that."

What an opportunity for in-

terviewers to give some information, concentrating on the individual ability, position in the organisation, etc., and perhaps the secret tool.

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DAILY MIRROR

THIS week's example of the strange things people say about computers was sent in by A. Murphy of Staines, Middlesex, who wins £5.

And it is conceivable, says the magazine article, that once Man has destroyed himself, a whole new species of mechanical beings will inherit and run the earth.

HARRY CARPENTER Team Captain

London SW4

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WORKPLACE

Digital methods keep Ordnance on the map

OUR priceless national asset, The Ordnance Survey map collection, is slowly and doggedly being digitised. The process has been going on since 1972 at Ordnance headquarters in Southampton, and now 2,500 maps are digitised annually at the three basic scales of 1:1250 for urban areas, 1:2500 for rural areas, and 1:10,000 for more remote mountain and moorland regions.

About 20,000 maps are now in digital data form, and at the exist-

ing rate of conversion, it would be 2030 before the whole UK is covered. But the process will speed up, and Ordnance expects data covering most of the UK to be digitised by 1993.

At present it is mainly urban areas that have been digitised, although only a small start has been made on London. Areas are digitised as they come up for resurvey, and for this reason lucky Cornwall has been completely converted.

Map digitising involves assigning two qualities to each feature: a grid reference of its position, and a code of its type, which may be road, fence, tree or bivvy.

Flexibility and marketing are the two big advantages of digital data to Ordnance Survey.

The digital data can be sold, and is being used already by local authorities and water boards, among others. Here the flexibility comes in since the data can be edited according to user requirements, with an architect for example, being able to project alternative building designs on to existing maps.

Perhaps the hardest problem of all is that of copyright. All Ordnance Survey maps are Crown Copyright, which means that they may not be reproduced without permission for 50 years after publication. With the map data in digital form, copyright becomes a non-issue.

Ordnance Survey has a copy branch dedicated to pro-

tection of the huge investment in maps and data. "We still expect to collect royalties when a client buys a digital tape from us, plots it and beams the information out," explains Liz Owen, a member of the branch. "But a lot of our customers such as local authorities are already licensed and have an in-built facility to use Ordnance digital data."

Because of the need to exploit the huge existing heritage of data in hard copy map form, Ordnance Survey differs from other organisations in its use of digital mapping tables. There are 24 Ferranti Frescan digitising tables to capture the data from enlarged film negatives of the maps. Two Xyntex fast plotters are used for checking the plots, which are then edited on one of three Lasercan workstations. Two Ferranti Master Plotters produce the quality output on to photographic film for subsequent map production.

The original digitising from the enlarged map negative is performed using a cursor carried manually across the table. Each feature is captured by placing the cursor over it, and selecting the appropriate button from a menu of features — fences, houses, roads and many others. The co-ordinates of the feature are recorded automatically on to magnetic tape.

Vickers showed us some prototype maps printed direct from the digital data in the predictably well covered area of Southampton, the Ordnance base area. He pointed out that there is little loss of accuracy in the batch process, while the correcting is online. Eventually, when

the scaling down needs a program to describe which features of the large scale maps are to be left out of the smaller ones. One such feature is the domestic garage, which is included in the large 1:1250 maps, but not in smaller scale ones.

Text can be a problem. If it is scaled down with the map, it soon becomes unreadable and looks isolated as other features are dropped out. But if it is kept the same size, it splits its boots, and overwrites adjacent map features.

Clearly the answer is what has always been done in practice: adopt some intermediate text scaling, abbreviate the words, or leave them out altogether. But such sophistication is as yet beyond the computer, and will have to wait for some derivative of artificial intelligence applications now being developed.

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At present the initial digitising is a batch process, while the correcting is online. Eventually, when

**PEOPLE**

NTL appoints new managing director

■ NETWORK Technology (NTL) has a new managing director, Trevor Sokell, who has also been appointed a main board director of Information Technology, the holding company which co-ordinates and manages three subsidiaries, NTL, OTL and CTL.

Sokell joins the company from Menzies Communications where he was managing director from

1977. Menzies Communications, a subsidiary of the Menzies Group, was established by Sokell to specialise in computerised voice response systems, viewdata and retail point of sale.

Before that, Sokell was with ICL for 15 years, where he held a variety of sales and product marketing positions. Just before leaving ICL he was business manager for

communications products.

■ Norman Harris has joined Comptervision Europe as European marketing manager within the Architectural, Engineering, Construction (AEC) Support Group. He was formerly with British Nuclear Fuels where he was computer applications manager.

■ New vice-chairman of the Peripherals Suppliers Association is John Turner, UK sales manager with the data products division of Thorn EMI Datatech. Turner joined the PSA in 1979 and has been a committee member for the past year.

■ Ex-Wang territory sales manager John Aherne has been appointed sales manager, Accron Microsystems, at Newton Laboratories.

■ Quotel has appointed John Bowman-Daniels as salesman. He was previously with Hambril Life.

■ Philips Business Systems Viewdata has appointed Dr Gwylf ap Gwylm (above) as general manager. He was previously responsible for small office systems marketing at Philips' business equipment division.

■ Two new analysts/programmers

have joined Prolog Systems. Clive Martin-Ross was previously with RHM foods and Sid Seton was formerly with Applied Communications. Both now work in Prolog's Hewlett-Packard division.

■ Electronic Associates has appointed Alan Gilmore to its sales team. He joins HAL from Hunting Hivolt where he was sales manager.

■ Product manager at Impextron's optoelectronics division is Paul Springate. He joins the company from the Radio and Space Research Station at Datchet.



■ Alex Kull has been appointed European marketing manager, systems software, at Cincom Systems International. He will be based in Brussels, moving from Cincom's headquarters in Ohio where he was manager of corporate marketing.

■ Root Computers has promoted David Saunders from managing director to chairman. Replacing him as MD is Michael Kinton, previously the company's commercial director.

■ Ray Sheenan has been appointed senior consultant to the National Microelectronics Applications Centre in Limerick. He was formerly project manager at Telecom.

■ Paul Murphy has joined Management Science America as systems consultant. He was previously with Carborundum Data Systems, where he was senior systems analyst.

■ David Hubbick has joined Atlantic Computer leasing as manager, ISM systems marketing. He was formerly with IBM's ISM division as marketing representative.

■ Acces Data Communication has expanded its field sales team with the appointment of Malcolm McElroy and Peter McMahon. McElroy joins the company from ISG Data Sales and McMahon was previously with AM International.



VICKERS ... Digital maps can be more accurate.

Scroogs feels the sting in our Christmas tale

IT WAS Christmas Eve, and Edward Scrooge was a happy man. In his 10 years as DP manager of Pontypridd Smokeworks, his principal task had been the restructuring of the company financial year to correspond with the end of the calendar year, and he had finally convinced the board to accept his proposal.

How Scroogs had achieved this was not clear, but it was rumoured among the rough journeymen in the smoke foundry that he had in his possession certain photographs of the chairman and the canteen manageress which might prove embarrassing should they appear on the inter-works darts league scoreboard.

The introduction of the 2966 meant that VME could be used, and the need for operators had been greatly reduced — though not by the savage amount instigated by Scroogs. Only one operator a shift now remained, Scrogs choosing the weakest-willed, and wherever possible, crippled staff. He still bore the scar over his left eye where, years before, a headstrong young operator had thrown a 200 Mbyte disc pack at him for refusing to pay him overtime for working right through a weekend.

And so it was that Scroogs, not a man usually given to savoring enjoyment, let alone glee, smiled quizzically at his reflection in the mirror of the executive toilet. Not many had the requisite status to hold a copy of the key to this Shangri-La which boasted soft toilet paper, but Scroogs' 10 years of unflinching devotion to the company had not gone unnoticed or, unrewarded.

Scroogs had no time for Christmas. He lived alone, in a frugally furnished house, had no friends, and lived for his work.

This was the main reason for his attempts to have the year-end processing carried out during the week between Christmas and New Year. In previous years, the Smokeworks DP department had closed down for Christmas week, and Scroogs had been obliged to sit at home, reading through old compilation listings, noting who had made mistakes which he might be able to use as ammunition for one of his frequent and unpleasant attacks on his staff.

This Christmas would be different.

"With year-end coming up, we can't afford any mistakes, so the entire systems staff will be in attendance over the next week to



make sure everything goes all right," Scroogs told his staff.

The staff grumbled under their breath. Scroogs had them where he wanted them. The Smokeworks was the only employer for 30 miles.

Down in the machine room, he visualised the scene as the new ICL 2966 glided effortlessly through the first of the year-end runs. It had been one of his best moves, he mused, to get rid of the old IBM 360, which although capable of doing the work required of it, needed 30 operators on three shifts to keep it running.

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right through a weekend.

The evening shift operator,

Tim, known as "Tiny" ever since

his terrible accident with the de-

collator, gazed morosely at the

master console. His new artificial

legs were to have been fitted that

week, but with all leave cancelled,

all he could do was dream.

On the floor above, Scroogs felt

that, at last, all was right with his

world. There would be no miser-

able Christmas break for him this

year.

A sudden metallic clanking

wake Scroogs from his reverie. In

the doorway, shrouded in a luminescent haze, stood a rust-streaked IBM 360, its light, dim with age, flickering menacingly. A blueprint materialised beside him. Over by the Wards' Link hand driver, a cluster of seven track tape decks appeared.

The pub was crowded with re-

velveteen group of family faces.

On the table before them lay a

pid machine," blustered Scroogs. "That says Ebenezer Scrooge."

YES I AM THE GHOST OF COMPUTING PAST LINE FEED CARRIAGE RETURN YOUR OLD 360/158 LINE FEED CARRIAGE RETURN TURN?

"No work... kids hungry... sold the telly... only drink I've had all week... wife left me... all his fault... kill the bugger if I get my hands on him."

Who are they so angry at?" asked a worried Scroogs.

I MEAN I'M GOING TO KILL YOU IF YOU DON'T MEND YOUR WAYS LINE FEED CARRIAGE RETURN."

"Aren't species supposed to give advice rather than death threats?" enquired Scroogs.

TIMES CHANGE WE MUST ADAPT TO THE 1980S YOU WILL DIE IF YOU DO NOT CHANGE WE HAVE THE TECHNOLOGY LINE FEED CARRIAGE RETURN.

"I haven't got time to read," replied an irate Scroogs.

The 360/158 fell silent. It was thinking. This is what it was thinking: "If he hasn't read the book, then I don't have to go through all that business with the orphans, and Tiny Tim's leg operation. Computing present and computing yet to come can stay at home. I'll go straight on to the graveyard bit."

The Dog and Bucket faded, to be replaced by the cold stillness of a graveyard. In the distance an owl hooted.

"Why have you brought me here?" asked Scroogs.

The 360/158 pointed a grisly

telephone finger at a tombstone.

"You can't frightened me, you sm-

art."

Please send me details of exhibiting at Compec Wales.

Name _____

Job Title _____

Company _____

Address _____

Signed _____

Note: Due to the special method

of fence construction, the width of

the supporting posts can be ignored.

And the various dimensions of

the fence will be the same as the

width of the land.

See page 31 for solution.

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PERSONAL COMPUTERS

With more people turning to packaged software, Phil Manchester argues the case for structured design in programming

Structured programming will soon arrive with a vengeance

THE "father of structured programming", Professor Edsger Dijkstra, upset a lot of people in 1977 by saying that microprocessors were not a good thing.

He made his controversial statement at a public conference (IFIP 1977) because he felt microprocessors would set the cause of good programming back 25 years.

He argued that the slowness and smallness of micros coupled with their "chaotic, unsystematic order codes" and unreliability would mean a repetition of the same mistakes that were made in the early days of mainframe computers.

A quick glance through any of the micro magazines, bulging with clever little programs that use every bit of an 8K RAM, would seem to have proved the noble professor right. All of the work that has gone into improving the programming draft during the past 10 to 15 years appears to have been totally ignored by the micro enthusiasts — computerniks, as Dijkstra's critics call them.

While they are tinkering away in some version of interpretive Basic on their eight-bit micro, there is no cause for alarm. But 16-bit and

even 32-bit machines will be replacing these toy machines sooner or later.

The purchasers of these machines will expect to be able to perform the same tricks on these super-micros as have been already achieved on mainframes.

A concern for the "draining of our intellectual powers to an extent that no society can afford" — as he called it — underlay Dijkstra's criticism of micros.

In this speech and his earlier work on structured programming Dijkstra was simply pointing out that programming was a very difficult craft to master and that it could be made easier with a formal approach.

This argument has been behind

many attempts to improve the software development process and increase the productivity of the programmer.

This mission has never been more important than it is now, with computers being installed at a rate far in excess of the rate at which new programmers are being "trained".

A solution to this problem is pre-packaged growth in the last couple of years. In many cases, however, this is only a short term solution especially in the area of applications software.

The only alternatives are to let the idiosyncratic methods of producing software carry on as they have always done, or to resort to a formal method of software production.

Dijkstra is sceptical about "methodologies". In an interview just a year ago he slammed instant programming enlightenment as purveyed by method vendors: "In the area of methodology there are so many quacks and charlatans — the one-hour seminars or the three-day courses where all speakers are 'guest experts'. There is one useful thing about the advertisements for these short courses — if they are prefixed by the words in-depth, you can be sure that they are junk!"

Of course, most commercial programmers and their managers will dismiss this emphasis on method as "too academic" and "ivory towers".

But maybe they are missing the point. Just like the people they scorn for a Luddite attitude to computer technology, they too are rejecting something relatively new. Allowing for the typical gap that occurs between the conception of a new idea and its emergence into the real world as a "product",

structured programming is due to arrive with a vengeance over the next few years.

Although Dijkstra first talked about structured programming in 1968 (GOTO statement considered harmful), it was not until 1972 in his paper, *The Humble Programmer*, that the world at large was to find out about it. Typically the technology gap, as it is sometimes called, is eight-to-10 years.

So, structured programming as a viable commercial proposition is overdue. That is, assuming that there is something in it. A lot of influential people are beginning to believe so. The US Department of Defence, for example, has spent the last eight years pushing the concept of a more manageable language for systems programming with what is now called Ada.

One of the key factors in Ada is supposedly its ability to enforce structured method on the programmer. This is not to say that it would be impossible to write a bad program in Ada, but that it will be a lot easier to write a good one.

Regardless of its merits, at least the concept of formalising programming is embodied in Ada and its associated environment. At the same time, IBM has renewed its belief in structured programming as a solution to its mammoth software problem. Last year it published the results of work in its Federal Systems Division under Harlan Mills.

Mills was IBM's first "super-programmer". In a brave experiment conducted in the late 1960s, Mills led what was called a Chief Programmer Team. After discovering that the Chinese Army approach to software production was a disaster, IBM set up the Chief Programmer project around Mills, at the National Westminster Bank, Plea-

sey and Imperial College London to combine their various resources to produce software tools for the first of what could be many such ventures.

So, there can be no disputing the will of computer technologists worldwide to "make things better".

But how will this shift toward formal software specification and development effect the average ZX81 user?

The answer lies between very little and not at all.

For a start, the small personal computer is limited by all of the things that Dijkstra mentioned in his IFIP speech quoted earlier. It is also limited by the programming language it offers.

The only way that the casual programmer is going to find out about formal techniques is by accident. They are too difficult to convey in a magazine article or a newspaper feature. When they are good enough to merit attention, they are invariably presented in an overtly academic manner, relying on complex mathematical notation rather than plain simple English.

And, after all, why should a casual programmer be at all interested in finding a better way to produce programs?

Surely, our Pet or Apple user is quite happy entering line after line of soggy Basic?

For the answer we must return again to our academic mentors. Joseph Weizenbaum, another renegade computer man, this time from the Massachusetts Institute of Technology, voiced his fears over what he called the "computative programmer". He sees a new breed of person emerging from the brave new world of tomorrow's computer technology whose raison d'être is simply to program.

That is a long-winded way of saying software engineering. As is well known, the report has been variously described as an implausible list of wishes and a blueprint for future computing technology.

Either way, the research goal of finding better ways of software production is a noble one and has already received a response from the mini-replacement market and also to the cycle comprising system design, development, maintenance and management.

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Either way, the research goal of finding better ways of software production is a noble one and has already received a response from the mini-replacement market and also to the cycle comprising system design, development, maintenance and management.

At about a quarter the price of a PDP-11/07 these machines are bound to take a large slice of the mini-replacement market and also to win a large number of new users who need a hefty system but

want to do well to use them.

ONE of the problems with computer hardware is that it is a moving target. As soon as someone pins a definition to a box then the box metamorphoses into something else.

It is noticeable today with the personal computer. When these systems first appeared they were defined as being for the hobbyists — the "freaks" who thought that Assembly was the only way to talk, and the soldering iron a logical extension of the right arm.

It was felt that these machines, systems like the Altair, the IMSAI and the SWTPC 680, would be used in homes for fun, education, maybe a little bit of programming.

Indeed they were used in that manner, especially in the US. But more often, they were used occupationally, in some form of business or venture.

In the end, the "personal computer" changed definition. It became the small business machine. Sometimes it was still called "personal", but this only referred to the wrong way to view the subject.

As the man responsible for marketing TI's 99/4A home computer in this country, I views the definition of the breed as follows: It should be specifically designed for use in the home by the entire family rather than by a machine that, by chance, can also be used in the home. To this end, it should incorporate plug-in software modules, colour graphics and good sound reproduction capabilities.

It should also be simple to use, at least as simple as the current crop of video games, and it must be to use that grossly overworked phrase, user-friendly.

His views are interesting for he claims that the home market was greater flexibility is that I often wait until eventually to transmit stories, so I'm actually working longer hours.

Writing on a word processor is both easier and faster than using a typewriter. On the one hand, I can access my telex account from any telephone and any computer terminal in the country, which makes it easier to keep in touch with CNET.

Before I had the computer, I used to transmit stories to Computer Weekly by reading them over the phone. With a modem, a telex account and the appropriate software, I no longer need to watch the clock in terms of calling when the office is open, and there's less wear and tear on my voice. Also, I can access my telex account from any telephone and any computer terminal in the country, which makes it easier to keep in touch with CNET.

Having a computer has made me neater. I am terrified of losing files on my discs, so I have become compulsive in terms of putting discs back in their proper place. Nor have I implemented the "paperless office" — paper is still quite handy for jotting down quick notes.

On the other hand, it's easy to back-up and restore. Make sure you've got either a backup copy of critical information, or a write protect tab on the disc.

5. If you have games on your computer, wait until after business hours to play them. Resist temptation.

I had spent some time gathering information about the various systems available — chiefly the Apple II, of course, and the Xerox. The announcement of the IBM machine changed the game, and it quickly became clear to me that the IBM was the "best" choice.

The reasons were simple. First, it seemed obvious that the IBM PC would set a de facto standard. Second, in ergonomic terms, the Apple seemed the least flexi-

ble, the Xerox 820 more so, and the IBM, the closest to an ideally designed system.

My computer is used daily — I

IPL (an old programmer, I re-

use it, which seemed to be both reliable and interfaceable with the IBM.

How has having the computer changed my life? Well, I don't have as much available time as before. With an expensive item such as a computer, one naturally wants to keep abreast of developments, so I subscribed to PC Magazine, a new California publication that specialises in news of the IBM PC.

Scratch three or four hours per month. And, of course, I joined an IBM PC users' group; scratch four more hours per month. And I got roped into editing the group's newsletter; that's four more hours.

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COMPANY PROFILE

STABLER (left) and PRICE... Looking to the next Zip generation.



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The new company will not be paying the old company's debts.

Basically, the old Data Dynamics had its name changed by the receiver to Data Dynamics Realisations - of which all that is left are debts.

This process allowed a risk capital company called Innotech to step in and buy up the assets and the business of Data Dynamics,

The company is now on the road to recovery... Boris Sedacca reports

including the name, using a shell company called Scanprobe and re-registering its name as Data Dynamics.

Neat.

"I have to make it clear that we will not be paying the old Data Dynamics' debts, nor are we obliged to do so," says Innotech director Humphrey Price.

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Ex-Data Dynamics employee Gerry Tuff's bought part of the company

BOOKS

"Can we swap this for free ice-creams for a year?"

Lawyer's guide bridges the knowledge gap on computer evidence

The Computer in Court, Alistair Kelman and Richard Sizer, Gower Publishing Company, £14.50.

COMPUTER evidence will become increasingly important in the future, as the spread of automation decreases the likelihood of a human witnessing crime such as fraud or theft.

This means that lawyers will have to learn special techniques for examining expert computer witnesses to highlight flaws in computer output, and computer users must ensure that systems provide information that is valid in a court of law.

It concentrates on potential problem areas such as establishing the admissibility of computer evidence, showing areas where errors could invalidate results pertinent to a legal case, which helps to keep the book short and good for quick reference.

Chapters Four to Seven cover an imaginary trial of a character called Grapefruit Sorbet, accused of theft of groceries from his employer, Cornet Supermarkets Limited. Prosecution evidence hinges on output from the supermarket's Kamikaze DDB7 computer and Mr Honey-Bunny, defence counsel, sets out to prove that a dubious

order processing system, developed by a programmer named Cherry Cheesecake, had given Sorbet the oysters, Champagne and caviar he is alleged to have stolen.

Aspects of the court case are analysed in Chapter Eight, and the authors go on to suggest some guidelines for the future, including the draft of a seven-statement affidavit that computer personnel could swear to confirm the validity of a computer printout.

While this is an extremely readable and informative book, the authors may have gone slightly overboard on the court case section, which they clearly enjoyed writing. There is a danger that informative material may be trivialised by a flippant approach.

Despite this, however, it is still a very useful book packed with valid information for which there is a growing demand.

M. McL.

Intensive parallel processing

Parallel Processing Systems, Edited by David J. Evans, Cambridge University Press, £21.00.

COMPARED with the body of knowledge and experience relating to serial, von Neumann type computers and their operations, information on parallel processing borders on the non-existent.

This work is a summary of the intensive course in parallel processing given at Newcastle University in September 1980.

It is succinct, clear, fascinating but in places all too predictably complex.

With at least one Japanese micro company determined to introduce a desktop array/parallel processor, and machines like the ICL Perq becoming increasingly common, no good analyst or programmer should be without a working knowledge of this topic.

Professor Evans' compilation is a thoroughly useful, if advanced, starting point.

K. C.

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Gulf between thinker and thinking doer

Machine Intelligence and Related Topics, Donald Michie, Gordon and Breach.

Turing was not particularly trying to build a computer. He was trying to solve a problem in mathematics. From those early days, in which Michie himself was a participant, the book takes us on into the likely shape of things to come, when we have discovered how to encode intelligence in computers.

Michie discusses, in far too short a page, the computer-aided diagnostic system invented by Tim de Dombal in Leeds, and reveals the gulf between the thinker and the thinking doer.

Michie compares a diagnostic system which gives accurate diagnosis to occasional levels of 91%, with a medication counselling system which does not have either the same functions or objects, and is more difficult to monitor.

It is well written, engaging, even if it suffers slightly from the intensity of Michie's own perceptions, and from the sheer information density of the topic.

The criticism Michie makes is that de Dombal's system is too simple. It's not complex enough. What is overlooked is that it works.

He leads into the subject by recounting a little of the life and work of Alan Turing, the theoretic

al creator of the modern digital computer.

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Application forms may be obtained from the Personnel Manager, The Associated Examining Board, Wellington House, Station Road, Aldershot, Hampshire (Tel: Aldershot 25551), to whom they should be returned, marked 'Private and Confidential,' not later than Friday, January 7, 1983.

(The Board's offices will be closed for the Christmas break from midday on December 24, 1982, to January 3, 1983, inclusive.)

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Europe's giants clinch R&D deal

by Philip Hunter

EUROPE'S two electronics giants, Dutch Philips and German Siemens, have joined forces in long-term information technology research and development.

The two companies spend a combined £1.5 billion a year on R&D. Their initial outlay in backing the EEC call for a \$400 million strategic plan, Esprit (European Community's Strategic Programme on Research and Information Technology), is \$3.7 million and 50 scientists.

A Philips spokesman said that closer co-operation could follow.

Both companies stress that short-term product development – less than five years – is excluded from the current agreement and that the companies will remain rivals.

The deal is aimed specifically at products related to the computer industry, and includes semiconductors, microelectronics, computer-aided design and speech recognition.

This is the fourth in a series of joint deals that Philips has started this year. It has concluded a second source agreement with US micro maker Intel for its CMOS chip, with Intel to get consultancy advice from Philips on communications structures for its microcomputer.

The Dutch giant is holding talks with German electronics firm Grundig, in which it holds a 24.5% share.

The French State-owned company Thomson-Brandt is trying to



CURRYS – "400% leap took us by surprise," but "temporary shortages only, from week to week".

Santa is clean out of micros

by George Black

MANY who have been looking forward to a home computer as a Christmas present could be disappointed. For suppliers have seriously underestimated their appeal and now find themselves unable to keep up with the demand.

Philip Denyer, micro buyer for Laskys, said: "It is true that there is a general shortage right across the board. In particular there is a problem with getting the Atari 400 and the Commodore Vic 64 to meet customer demand."

"We expect to be about 500 short of each model round the whole country this Christmas."

Laskys stopped taking orders for the Vic 64 in early December because it knew it would not be able to deliver before the holiday. However, it was hoping to catch up with requests for the Atari by the middle of January and for the

Vic 64 by late February.

A spokesman for W. H. Smith

reported a similar picture: "We

aren't going to have enough Sin-

clair Spectrums and ZX81s to ful-

fil the requests from our

branches."

Only 60 branches of Smith's

stock the Spectrum anyway, he

pointed out, but the ZX81 is nor-

mally available nationwide.

Nigel Searle, for Sinclair, said

ZX81s were being manufactured

at a rate of 10,000 a day and it was

planned to boost production early

in 1983 either at one of the two

present plants or by starting a new

one.

At Currys the story was of "tem-

porary shortages only, from week

to week", but the spokesman said

the company had been taken

by surprise by the high level of

demand in the shops. It had gone

up by 400% in the previous

month.

And even leaving Christmas out

of the reckoning it appeared that

demand was likely to be at a far

higher level from now on.

Lockages seemed to have oc-

curred mostly at Customs, since

post were being imported.

US firms back Ethernet standard

by Donald Kennett

THIRTEEN US companies have echoed the European Computer Manufacturers' Association initiative in June by endorsing the Ethernet local area network standard in its latest draft form.

In June, ECMA got 20 companies – many of them American – to back its version of Ethernet, even though another version was

already being processed through the US Institute of Electrical and Electronic Engineers.

Since then the IEEE has worked closely with ECMA and Xerox, which originated the Ethernet system in the early 1970s, so that all three have agreed on the same version.

IEEE working group chairman Don Loughry of Hewlett-Packard said that all three parties had agreed to minor changes in their specifications, and the IEEE draft document now contained precise technical details which had only been described in general terms before.

ICL, which was a major backer of the ECMA agreement in June, welcomed the news from the US as a significant step towards Open Systems Interconnection at the link level.

Support was also gathering behind a draft proposal being put to the International Standards Organisation which described a protocol for the Transport Level of ISO's seven-level interconnection model, a spokesman said.

Sick pay revamp – to charge or not

by John Kavanagh

SHOP around for payroll packages: that is the message to users from the market as software houses and bureaux take different views on charging for the changes needed to handle new sick pay legislation.

The new rules put greater onus on employers to keep track of employees' sick days and work out how much sick pay should be paid. Users and package suppliers alike say the legislation means massive changes to payroll systems.

But the suppliers are split on whether to charge for the changes. Two of the leading package suppliers, MSA and PPL Cyborg,

say they are providing all the necessary upgrades at no charge as part of normal maintenance agreements.

But another, Peterborough Software, says many of the functions demanded by the new rules relate not to payroll but to personnel tasks, and it is changing for an optional module for its personnel system to handle those functions.

Bureaux, too, are split. Among the big names, Baric and Centrex are making the changes free of charge, but CMG director Chris Harrison said the company was still considering its policy.

"These changes are statutory so it's not normal to charge for them," said MSA payroll product

manager Martin Fairbairn. "Every year we have changes to make, free of charge, to handle new tax rules and National Insurance contributions arising from the Budget. Users enter maintenance agreements with us to get these changes as a matter of course."

David Dryden, marketing and development manager at Peterborough, said, "We've discussed the legislation with the Department of Health and Social Security and agreed that 90% of it relates to personnel functions."

"These include the recording of days of absence, the storage of entitlement details and the calculation of the number of days payable."

FAIRBAIRN . . . No charge.

LINE NOISE

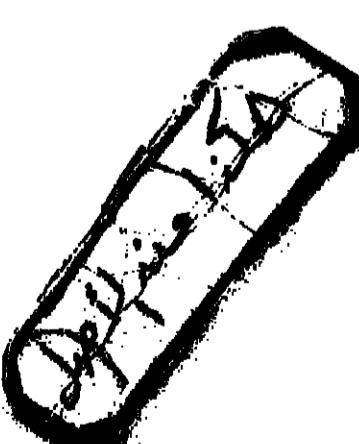
FOR those who have been keeping their fingers crossed for the sooner rather than later arrival of pucks IBM Personal Computers over here, the latest whisper is that IBM is to unveil the machine officially on January 18. But if it does not materialise then after all, do not lose hope. American giant General Electric, which sells the IBM PC as an intelligent terminal to its computers in the US, is planning to offer it in the UK soon, regardless of when IBM moves in.

The Scotch company Future Technology Systems, which recently won a British Technology Group prize for its 16-bit distributed network computer based on 8088 and 8086 microprocessors, is poised to begin its export drive into Europe. An announcement about a major distributor is imminent.

ICL faces an intriguing choice of UK supplier if it is to move into the 16-bit microcomputer market. At present it sells – and builds – the Rain machine, an ICL eight-bit personal computer. At the same time it buys 16-bit 2200 word processors from Logics VTS. But now Rain has a price of £10,000 and just as Logics has dropped the 2200 as a personal computer looking for dealers, ICL's compatriots ICL, has a price of £22,000 using the option of the CP/M-86 operating system.

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